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INNOVATIVE TECHNOLOGIES FOR DESIGNING SPORTS JACKETS

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The paper examines the use of modern innovative technologies for designing sports jackets, taking into account trends in fashion. It was found that the following innovative technologies are used in the design of sports jackets: the use of innovative fabrics with waterproof, windproof and dirt-proof properties, as well as quick-drying safe and environmentally friendly fabrics; products with integrated artificial intelligence, the Internet of Things and other advanced technologies depending on the needs of consumers.

Keywords: sportswear design, innovative technologies, waterproof, windproof and quick-drying materials, customization.

INTRODUCTION

With the variety of outdoor sports and the increasing complexity of the environment, consumers' requirements for sports jackets are no longer just satisfied with basic functions such as warmth and waterproof, but with the advancement of science and technology and the popularity of intelligent life, consumers' demand for intelligent sports jackets is also gradually increasing. They hope that sports jackets can integrate more intelligent elements and environmental elements, such as GPS positioning, temperature regulation, health monitoring, environmentally sustainable materials, etc., in order to meet the safety needs and environmental protection needs in outdoor sports and enhance the sports experience [1-4]. The innovative technology of sport clothing needs to focus on how to achieve product personalisation and provide diversified designs and choices to meet consumers' individual needs.

PURPOSE

The purpose of this paper is to analyse the diversified needs of outdoor sports people for punching jackets, and to create personalised technological punching jackets using modern innovative technology in combination with market demand.

RESULTS AND DISCUSSION

Outdoor sport punching jacket is not only a common insulated clothing for them, but also a kind of help and protection for them to do outdoor sports. The topical issues of the social demand of the innovation science and technology of the punching jacket include the enhancement of the functionality and practicality, the realization of the intelligence, the focus on the environmental protection and the



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sustainable development as well as the satisfaction of the personalised customisation needs. Choosing environmentally friendly recyclable windproof and waterproof quick-drying fabrics, increasing safety systems, combining customer customisation needs, and combining practicality, individuality and aesthetics are the development trends of modern innovative clothing. The realisation of these features not only enhances the performance and comfort of the jacket, but also meets the needs of consumers for safety, convenience and environmental protection in outdoor sports. Innovative smart punching jackets can improve the comfort and safety of outdoor sports. This should be done by using hypoallergenic and nonbacterial materials that are triple defence and quick-drying, incorporating a basic GPS security system, body temperature and heartbeat temperature monitoring to ensure people's safety, always monitoring the location of the crowd and their physical conditions, and sending safety distress signals when necessary, and incorporating an inflatable vest to prevent injury to the body when it falls to the ground in a dangerous situation. Environmentally friendly fabrics meet the needs of todav's sustainable ecosystem.

CONCLUSIONS

The functions involved in the topical issues of social demand for innovative science and technology for sports jackets cover a wide range of aspects such as waterproofing and breathability, wind-proofing and warmth-proofing, abrasion and water-resistance, intelligence technologies, as well as environmental protection and sustainable development.

REFERENCES

- 1. 王紫茜 (2023). 冲锋衣热销技术创新满足多元消费需求. 消费日报. A02. doi:10.28866/n.cnki.nxfrb.2023.001590.
- 2. 李安之 (2023). 冲锋衣的防泼水与其中的物理化学. 产品可靠性报告. (03), 35-39.
- 3. 陆尧 (2022). 户外运动服装冲锋衣面料耐磨性的研究. 中国标准化年度优秀论文. 论文集 3. 752-755. 淄 博 市 纤 维 纺 织 质 量 监 测 研 究 院 doi:10.26914/c.cnkihy.2022.053023.
- 4. 沈筱 & 濮琳姿 (2021).基于用户需求的冲锋衣款式优化设计. 纺织报告.(02).61-62.

ПАШКЕВИЧ К., ВАН Ц., ЄЖОВА О. ІННОВАЦІЙНІ ТЕХНОЛОГІЙ ДЛЯ ПРОЕКТУВАННЯ СПОРТИВНИХ КУРТОК

У роботі розглянуто використання сучасних інноваційних технологій для проектування спортивних курток з урахуванням тенденцій розвитку проєктуванні курток моди. З'ясовано. шо иап спортивних використовуються такі інноваційні технологій: використання інноваційних водонепроникними, вітрозахисними та брудозахисними властивостями, а також тканин, що швидко висихають, є безпечними та екологічно чистими: вироби з інтегрованим штучним інтелектом, Інтернетом речей та іншими передовими технологіями залежно від потреб споживачів.

Ключові слова: дизайн спортивного одягу, інноваційні технології, водонепроникні, вітрозахисні та швидковисихаючі матеріали, кастомізація.